

Claims

What is claimed is:

1. A cooling system for a vehicle, said cooling system comprising:  
a cooling system enclosure being positioned in a fore portion of said vehicle;  
an engine enclosure being positioned in said fore portion of said vehicle, said engine enclosure being aft of said cooling system enclosure, said engine enclosure being adapted to partially cover said engine; and  
a partition separating said engine enclosure and said cooling system enclosure, said partition being adapted to substantially block a mass of ambient air from flowing through said cooling system enclosure and said engine enclosure .
2. The cooling system of claim 1 further including a connecting member between said cooling system enclosure and said engine enclosure.
3. The cooling system of claim 2 further including a cooling conduit positioned in said connecting member.
4. The cooling system of claim 2 further including a means for cooling a fluid positioned in said cooling enclosure.
5. The cooling system of claim 4 wherein said means for cooling is a heat exchanger.

6. The cooling system of claim 5 further including a fan positioned aft of said means for cooling.

7. The cooling system of claim 6 further including a shroud positioned aft of said heat exchanger, said shroud being adapted to direct said mass of air away from said partition.

8. The cooling system of claim 1 wherein an enclosure aft portion of said cooling enclosure has a height H3 greater than a height H1 of an engine fore portion of said engine enclosure.

9. The cooling system of claim 1 where said partition is integral with said engine enclosure.

10. The cooling system of claim 1 further including a means for inducing additional ambient air.

11. A vehicle, said vehicle comprising:  
a frame;  
an engine attached to a fore position of said frame;  
an engine enclosure positioned about said engine, said engine enclosure having an engine fore portion and an engine aft portion;  
a cooling enclosure positioned fore of said engine enclosure, said cooling enclosure having an enclosure fore portion and an enclosure aft portion, said enclosure aft portion of said cooling enclosure being separated from said enclosure fore portion of said engine disclosure by a predetermined distance;  
a connecting member positioned between said engine enclosure and said cooling enclosure; and

a partition being connected with said engine fore portion of said engine enclosure, said partition being adapted to inhibit a mass ambient air flowing through said cooling enclosure from entering said engine enclosure through said engine fore portion of said engine enclosure.

12. The vehicle of claim 11 further including a means for reducing an air pressure between said engine enclosure and said cooling enclosure.

13. The vehicle of claim 11 wherein said enclosure aft portion of said cooling enclosure is a height H1 and said engine fore portion of said engine enclosure is a height H2, said height H2 being less than said height H1.

14. The vehicle of claim 11 further including a heat exchanger positioned in said cooling enclosure and a fan positioned aft of said heat exchanger.

15. The vehicle of claim 14 further including a shroud positioned about said fan, said shroud being adapted to direct said mass ambient air away from said partition.

16. The vehicle of claim 11 further including a means for inducing additional ambient air.

17. A method for cooling an engine in a vehicle, said engine being positioned fore in said vehicle, said method comprising the steps of:  
passing a mass of ambient air through a cooling enclosure;  
exchanging heat between a cooling fluid and said mass of ambient air;

inhibiting the mass of ambient air from passing into said engine enclosure; and  
directing said cooling fluid into said engine enclosure.

18. The method for cooling of claim 17 further including the step of reducing an air pressure between said engine enclosure and said cooling enclosure.

19. The method for cooling of claim 18 wherein said step of reducing includes accelerating an ambient air mass adjacent an enclosure aft portion of said cooling enclosure.

20. The method for cooling of claim 17 wherein said step of inhibiting includes blocking the mass of ambient air from entering an engine fore portion of said engine enclosure.